

IN THE ABSTRACT

The Abstract has been amended as follows:

In a method and apparatus to detect position changes of an implant x-ray detectable markers are arranged in the environment of the implant, and 2D x-ray exposures are obtained at temporal intervals of a region containing the implant in which a distribution of the markers as well as of marked points of the implant are visible in each 2D x-ray exposure. A first of the 2D x-ray exposures is obtained at a first point in time from one projection direction, and a second of the 2D x-ray exposures is obtained at a second point in time from another projection direction. The distribution of the markers and marked points is determined in the first and second 2D x-ray exposure by an evaluation device, and from the distributions a degree of probability is calculated that the distribution of the first 2D x-ray exposure and the distribution of the second 2D x-ray exposure are projections of the same three-dimensional distribution of markers and marked points. An automated detection of position changes by implants with reduced x-ray exposure for the patient is facilitated.